IN THE SPECIFICATION:

Please add the following paragraph after the title:

Cross Reference To Related Application

[0001] This application is a ***national stage*** of PCT/IN2003/000278 filed August 22, 2003 and based upon IN 783/MUM/2002 filed August 29, 2002 under the International Convention.

Please cancel paragraph [00012]:

~~**[00012]** It is thus noted that for bulk polycrystalline CrO2, the value of saturation magnetization more than 110 emu/g has not been reported in earlier.~~

Please replace paragraph [00028] with the following amended paragraph:

[00028] According to the present invention there is provided substantially pure chromium dioxide (CrO_2) having saturation magnetization of ~~above 110 emu/gm and preferably at least 115 emu/gm.~~ at least 120 emu/gm.

Please replace paragraph [00032] with the following amended paragraph:

[00032] Half metallic ferromagnet, substantially pure chromium dioxide (CrO_2) according to the present invention exhibits

saturation magnetization (M_S) of at least 120 ~~115~~ emu/gm. Preferably the M_S value is ~~atleast 120 emu/gm and most preferably~~ 135 emu/gm for cold pressed sample of CrO_2 and 126 emu/g for sintered pellets. As a consequence of such high purity of the sample, there is evidence of maintained spin polarization near room temperature and the chromium dioxide of the present invention exhibits negative magnetoresistance of atleast 0.5% near room temperature at 2 Tesla, preferably 2% and most preferably 5 % MR at room temperature at 2 Tesla for sintered pellet of pure CrO_2.

Please replace paragraph [00097] with the following amended paragraph:

[00097] The process of present invention for manufacture of half metallic ferromagnet, high purity chromium dioxide (CrO_2), or composites of chromium dioxide and chromium sesquioxide (CrO_2/Cr_2O_3) or composites of chromium dioxide and Cr_2O_5 (CrO_2/Cr_2O_5),

- does not need high-pressure equipment, is simple to operate and is cost effective;
- gives a polycrystalline CrO_2 in bulk, having saturation magnetization value close to the theoretical value at a temperature of 5 K;
- gives the final product in desired shape of fairly good hardness, required for all practical purposes such as for measuring electrical resistivity and making magnetoresistive

sensor etc.; This product which is fairly hard in the final form may be useful as target in Pulsed Laser Deposition and other techniques for thin film deposition.

- provides CrO_2 of substantially high purity suitable for spintronic devices.
- the % negative MR is found to be significant at room temperature depicting the spin polarization is maintained at such elevated temperatures~~, which is the consequence of very high purity sample~~.
- Provides composites in any desired ratio of the constituent compounds by a simple control of the temperature of heating the intermediate oxide.